Answer the following questions

1) α, α' dipyridyl is considered as:
a) bidentate chelating agent
b) Tridentate chelating agent
c) Redox indicator
d) Non of the above

2) Flexible Tetradentate chelating agent:
a) α, α' dipyridyl
b) porphyrin
c) Trien
d) EDTA
e) both c & d
f) Non of the above

3) Rigid tetradentate chelating agent:
a) EDTA
b) Trien
c) ~~porphyrin~~ porphin
d) Non of the above

4) it is masking agent for As & Sb:
a) CN^-
b) H-H-O in acidic Medium
c) TEA
d) BAL
e) both a & d

5) masking agents for Mercury:
a) KI / NH_3
b) KI
c) CN
d) BAL
e) Non of the above & it is ——

6) KI / NH_3 =
a) used as Metallochromic indicator
b) used as indicator in Leibo Method
c) used as Titrant in iodometry
d) Non of the above & it is ——

(7) It demasks the $Zn(CN)_4^{-2}$ in acidic M
(a) $CH_3-\overset{O}{\overset{\|}{C}}-H$
(b) As_2O_3
(c) DPA
(d) $H-\overset{O}{\overset{\|}{C}}-H$
(e) Non of the above

(8) _____ used to detect end point in the titration of Fe^{+3} by EDTA and Not PM indicator
(a) DPA
(b) Catechol Violet
(c) EBT
(d) KSCN
(e) both (b) & (c)

(9) PH indicator used at PH = 10 :
(a) DPA
(b) EBT
(c) Murexide
(d) both (b) & (c)

(10) b- hydroxy quinoline is a bidentate chelating agent (T/F)

(11) Mg^{+2} in EDTA Titrations
(a) its stability Constant with EDTA is small
(b) it gives good end point
(c) it can be replaced easy be Ca
(d) both (b) & (a)
(e) all of the above

(12) indet of $HgCl_2$ by EDTA write the equations
في حالة
$HgCl_2 + EDTA \rightarrow Hg\text{-}EDTA$
$Hg\text{-}EDTA + KI \rightarrow K_2HgI_4 + EDTA$
EDTA is titrated ع standard Zn^{+2} or Mg^{+2}

(13) Triethanolamine is masking agent for ---
(a) AL^{+3}
(b) Fe^{+3}
(c) Sn^{+4}
(d) both (a) & (c)
(e) all of the above

(14) _____ is selective organic precipitan
Ni^{+2}
(a) SCN^- (b) Dimethyl glyoxime (DMG
(c) Oxalate (d) NaOH

(15) interference of Cr^{+3} in EDTA can be removed by treating the solution ē NaOH / H_2O_2 (T / F)

(16) Ag^+ can be determined by direct EDTA titration (T/F

(17) The reason for your answer in previous question is _____
(a) Ag^+ form stable complex ē EDTA
(b) we need addition of ~~CN~~ $Ni(CN)_4^{-2}$ 1st
(c) Ag^+ Not form complex ē EDTA
(d) both (a) & (c) (e) non of the above

(18) $NH_2-CH_2-(CH_2)_4-CH_2-NH_2$ is a hexadentate chelating agent (T / F)

(19) CH_2COO^- is tetradentate chelating agent (T / F)
CH_2COO^-
This is because it is bidentate

(20) ~~(CH2-NH2)~~
(20) $(CH_2-NH_2)_2$ give ē Ag^+ a metal chelate of 1:1 (T
This is because it is poly nuclear comple formed (2:1

(21) Pb^{+2} is titrated ē EDTA in :
(a) H_2SO_4 medium (b) HCl medium
(c) HNO_3 medium (d) None of the above

(22) Al^{+3} is determined by residual EDTA titration

(23) The Formation of More stable Complex.
(a) Radius of Metal should be large
(b) Radius of Ligand should be small
(c) ↑ charge on Metal → ↓ Stability of Complex
(d) both (a) & (c) (e) Non of the above

(24) The Stability Formation Constant of a Complex is determined by :
(a) K_f (b) Log K_f (c) pK_f (d) all of the above

(25) The indicator used in Liebis's Method in Cyanometric titration is ----.
a) KI / NH_3 (b) SCN^-
c) EBT d) Catechol Violet
e) Non of the above.

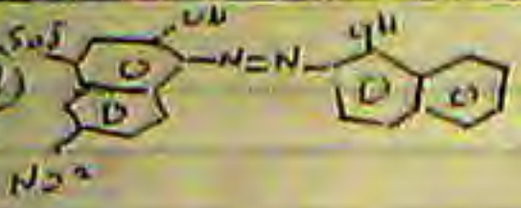
(26) EDTA make 5-membered Complex (T/F)

(27) Titration of Cu^{+2} Vs NH_3 is more feasible (easier) than titration of Cu^{+2} Vs Trien (T/F)

(28) Ca^{+2} is determined in EDTA titration by:
a) pH = 10 b) acidic pH (1-3)
c) 4-5 pH d) Non.

(29) The achieved pH you have choosed in preview question is obtained by ----.
a) CH_3COOH / CH_3COONa (b) Hexamine
c) NaOH d) NH_3 / NH_4Cl

(30) EDTA Form 1:1 chelate ê Metal ion (T/F)
(31) Murexide is pH indicator especially for Ca^{+2} (T/F)

(32)  it is ....

a) pH indicator
b) Redox indicator
c) acid-base indicator
d) Non of the above like

(33) The previous structure should not be used with
a) Mg
b) Cd
c) Zn
d) Fe
e) Co
f) both (b) & (c)

(34) PAS & PAN is ...
a) Metalochromic indicator
b) Redox indicator
c) acid-base indicator
d) Non of the above

(35) Volumetric Titration of EDTA we use ....
a) EBT indicator
b) Catechol Violet
c) Xylenol orange (X-O)
d) Methyl orange

(36) Redox indicator used in det of Fe^{+2} by EDTA ...
a) DFA
b) DPB
c) Ferroin phenanthroline
d) Vitamine blue B

(37) For detection of Ca^{+2} in presence of Mg^{+2} we use —
a) NH_3 / NH_4
b) NaOH (pH = 12)
c) Hexamine
d) Non of the above

(38) which of the following can be titrated ē EDTA —
a) Ag^{+}
b) Co^{+2}
c) Na^{+}
d) neither one
e) either one

(39) DPA is .... indicator
a) Redox
b) pH
c) acid-base
d) Non

(40) ____ is a salt whose cation increase the pot. Conduction potential of Ferricyanide / ferrocyanide redox system

a) $MnSO_4$ b) $MgSO_4$
c) $ZnSO_4$ d) Nun

(41) ____ salt lower the ox pot of Fe^{+3}/Fe^{+2} system

a) $ZnSO_4$ b) KF
c) KSCN d) $K_2Cr_2O_7$

(42) a) $MnSO_4$ b) KI_3
c) Na_2SO_3 d) $Na_2S_2O_3$

Match

(43) its solution is titrant in iodimetry
(44) its solution is backtitrant in iodometry
(45) it is a component of ZRR

(46) ____ used to remove HI in the iodimetric titration of Na_3AsO_3

a) NaOH b) Na_2CO_3
c) $Na_2S_2O_3$ d) $Na_2B_4O_7$

(47) in its solution iodine undergoes auto Redox reaction —

a) $ZnSO_4$ b) HNO_3
c) NaOH d) Non

(48) $Na_2S_2O_3$ is primary standard Reductant CT/F

(49) ____ is primary standard oxidant

a) $KMnO_4$ b) $K_2Cr_2O_7$
c) $Na_2S_2O_3$ d) all of the above

(49) ___ is cerimetric oxidation product of glycerol

a) CH_3-COOH
b) $H-\overset{O}{C}-OH$
c) $H-\overset{O}{C}-H$
d) CO_2

(50) To acidify medium of $KMnO_4$ we use ___

a) HCl
b) HNO_3
c) H_2SO_4
d) all of the above.

(51) ~~K~~ $KMnO_4$ is Reduced to Mn^{+2} in acid medium (T / F)

(52) according to Condition of Reaction $KMnO_4$ Can accept 2 or 3, 4 or 5 electron (T / F)

(53) according to Condition of Reaction $KMnO_4$ Can accept

a) 3 electron
b) 5 electron
c) 4 electron
d) one electron
e) all of the above

(54) $FeCl_2$ or $FeSO_4$ Can be determined by direct titration with $KMnO_4$ in H_2SO_4. (T / F)

صح (55) The conversion of K_2CrO_4 to $K_2Cr_2O_7$ involve Redox reaction (T / F)

احسب الـ oxidation no للكرومات والدايكرومات Cr سوف تجد انه ثابت في كلاهما (+6) لم يحدث تغير في Valency فلا يعتبر Redox.

(56) in the assay of Fe^{+2} by $K_2Cr_2O_7 / H_2SO_4$; using DPA, H_3PO_4 should be added (T / F)

(52) ZR reagent consist of:
(a) $MgSO_4$, H_2SO_4, H_3PO_4
(b) $MnSO_4$, H_2SO_4, H_3PO_4
(c) $MnSO_4$, $NaNO_3$ Znck
d) Non of the above lists ----

(58) The potential of single electrode is Temperature independent (T/F)

(59) To measure the potential of Ce^{+4}/Ce^{+3} redox couple, Pt electrode is used (T/F)

a) Soln b) KIO_3
c) I^-/alk d) NH_4F

Match

(60) Titrant of Andrews Method
(61) used for determination of aldehyde (R-$\overset{O}{\overset{\|}{C}}$-H)
(62) Component of K-F reagent (Karl-Fischer)
(63) Lower ox. pot of Fe^{+3}/Fe^{+2} system

(64) 1-10 phenanthroline
a) gives ferrous Redox indicator
b) used for Cerium titration
c) PM indicator
d) both (a) & (b)

(65) The indicator used in Andrews Method is --
a) starch b) I_2
c) chloroform d) both (a) & (c)

(66) Co-ordination Number is specific for —
a) Metal b) Chelating agent
c) both (a) & (b) d) Neither one

(67) The half potential of $KMnO_4$ in acidic medium is lower than in basic medium (T / F)

(68) $P_2O_7^{-2}$ can be used in Redox titration to ___
a) ↓ potential of Fe^{+3}/Fe^{+2} by complex ē Fe^{+2}
b) ↑ pot. of Fe^{+3}/Fe^{+2} by ppt$_n$ of Fe^{+2}
c) ↓ potential of Fe^{+3}/Fe^{+2} by complex ē Fe^{+3}
d) ~~both~~ None of the above

(69) addition of $ZnSO_4$ to Ferricyanide / Ferrocyanide system will allow the Fe^{+2} to be determined iodometry (T / F).

(70) at 50% titration of Fe^{+2} by Ce^{+4}, the potential of system is equal to:
a) $E_o\ Ce^{+4}/Ce^{+2}$
b) $E_o\ Fe^{+3}/Fe^{+2}$
c) $\frac{E_{o1} + E_{o2}}{2}$
d) None of the above

(71) at 200% titration (double end point) of Fe^{+2} by Ce^{+4}, the potential of system is equal to—
a) $E_o\ Ce^{+4}/Ce^{+3}$
b) $E_o\ Fe^{+3}/Fe^{+2}$
c) $\frac{E_{o1} + E_{o3}}{2}$
d) None.

(72) Methyl orange is ---- indicator
a) specific
b) self
c) external
d) irreversible

(73) ---- is an example of external indicator of Redox system
a) Ferrocyanide
b) Ferricyanide
c) SCN^-
d) None

(74) ---- is an example of Redox indicator
a) DPA
b) Methylene blue
c) All of the above
d) None

(75) Nitrite can be determined by $KMnO_4$ directly (T/F)

(76) in det of $NaNO_2$ by $KMnO_4$:
a) Reverse titration is needed
b) the medium should by acidic
c) Medium is basic
d) both (a) & (b)

(77) Reduction of MnO_4^- to Mn^{+3} in acidic Medium, in the presence of ---
a) Fluoride
b) pyrophosphate
c) Barium
d) both (a) & (b)
e) all of the above

(78) $MnO_4^- + 4H^+ + 3e^- \rightleftharpoons MnO_2 \downarrow + 2H_2O$
This reaction in :
a) highly acidic Medium
b) Neutral or basic Medium
c) in determination of aldehyde & poly hydroxy cpd.
d) both (a) & (b)
e) both (b) & (c)

(79) determination of Ba^{+2} by $KMnO_4^-$:
a) in alkaline Medium
b) $KMnO_4^-$ is reduced to MnO_4^{-2}
c) it is type of back titration
d) both b & c
e) all of the above

(80) oxalic acid & ferrocyanide can be determined by ---
a) KMnO4
b) K2Cr2O7
c) K2Cr2O7
d) all of the above

(81) The oxidation product of glycerol by dichro

a) H-C-H b) H-C-OH
c) CH3COOH d) CO2

(82) in determination of glycerol or PbO by dichromate we should do back titration of xs chromate using ... ... method
a) Iodimetry b) Iodometry
c) hypoiodite d) Non.

(83) Ce^{+4} / H_2SO_4 the reaction with oryanic compound is very slow while the reaction of Ce^{+4} / HClO4 is Rapid C T / F

(84) The reason For your answer is Privious question is due to ....
a) ClO_4^- is poor complexing agent
b) SO_4^{-2} is poor ~ ~
c) ClO_4^- is strong complexing agent
d) SO_4^{-2} is strong ~ ~

(85) The Cerimetric titration of diacetyl cpd with ...
a) H-C(=O)-OH b) CH_3-C(=O)-NH
c) CH_3-C(=O)-H d) H-C(=O)-H

(86) Det. of $NaAsO_2$ iodimetry in ....
a) acidic Medium using HNO3
b) basic Medium using NaOH
c) basic Medium ~ Na_2CO_3
d) ~ ~ ~ $NaHCO_3$

(87) to determine Fe^{+2} iodimetry H_2SO_4 is added C T / F

(28) To determine Cu^{+2} Iodimetry we can use
a) I- to make CuI ppt
b) SCN^- to make CuSCN ppt
c) both (a) & (b) d) non of the above

(29) Starch is -
a) indicator give blue color in both I_2 & I^-
b) Can be used in strong acid Medium
c) need preservative agent (H_3BO_3)
d) all of the above

(30) in Iodometry titration ---
a) starch is added in the oxidising agent
b) Starch should be added only near the EP
c) We can't use starch
d) Non of the above

(31) we can do acidity of Medium in Andrews Method by addition of -----
a) KSCN b) KI
c) KCN d) Non of the above

(32) Lange's Modification ----
a) we can't use Starch as indicator
b) KIO_3 is titrant
c) 1 - 2 N HCl is needed
d) both (a) & (b) e) both (b) & (c)

(33) The oxidation product of glycerol by periodate (IO_4^-) is -----
a) H - C - H b) H - C - OH
c) CO2 d) Non

(94) The oxidation product of $CH_3-\overset{O}{\overset{\|}{C}}-\overset{O}{\overset{\|}{C}}-CH_3$ using Hg salt is ——
a) $H-\overset{O}{\overset{\|}{C}}-H$ b) CH_3COOH
c) CO_2 d) Non.

(95) The oxidation product of 2ry amine by Hg salt is ——
a) 2ry amine b) 1ry amine
c) 3ry amine d) Non.

(96) The ratio used for indirect Bromination is
a) 1 Br^- : 5 Bromate
b) 1 Br^- : 1 Bromate
c) 5 Br^- : 1 Bromate
d) Non of these ——

(97) all of the following can be determined by quantitative Bromination except ——
a) phenol b) Salicylic acid
c) benzoic acid d) sulphanilamide
e) Mg^{+2} salt f) unsaturated fatty acid

(98) Sod thiosulphate ——
a) used in redimetric titration
b) used in Iodometric titration
c) it is Std oxidising agent

(99) The oxidation product of $S_2O_3^{-2}$ by I_2 is ——
a) SO_4^{-2} b) $S_4O_6^{-2}$
c) SO_3^{-2} d) all of the above
This is because —— I_2 is mild oxidising agent

(100) strong oxidising agent can oxidise $S_2O_3^{-2}$ to SO_4^{-2} with loss of 8 electron (T/F)

(101) Bacterial actron of $S_2O_7^{-2}$ lead to __
a) S b) SO_4^{-2}
c) SO_3^{-2} d) all of the above

(102) air oxidation of $S_2O_7^{-2}$ lead to all the following exCept ___
a) $S_2O_4^{-1}$ b) SO_3^{-2}
c) $S_4O_6^{-2}$ d) S

(103) $S_2O_7^{-2}$ Can be used in det of pho CT/F

(104) pH in det of Curve by $S_2O_7^{-}$ is 3 CT/F

(a) Corning 015 glass = Soda Lime electrode
(b) WAS C (11 - 18)
(c) Assym potential
(d) Lithia - silica electrode
(e) Antimony E.
(f) pt - Electrode
(g) Ag / AgBr E
(h) Ag / Ag+ E
(i) Junction Potential
(j) Boundary potential
(k) Nas - ISE
(l) SHE
(m) F - ISE
(n) SCE.

Match

(105) it is primary reference electrode
(106) Secondary reference electrode depends on Cl^- conc.
(107) used As inert electrode
(108) electrode of 2nd type whose potential is pH-dependent
(109) An example of Single crystal ~~electrode~~ ISE
(110) " " of Liquid Membrane electrode.

(10) an electrode whose potential depend on Br⁻
a) Electrode of 1st type
b) Used Fabricate (Prepared) para electrode
c) Used to Fabricate glass electrode for accurate measurement of pH range 9-14 .ans

(11) The potential developed at membrane electrode due to ion exchange process

(11a) It is property of GE

(11b) Fe (s) / Fe^{+2} is electrode of 1st type (T/F)
- This is because - - deformation of crystal

(11c) Coulometry and Colorimetry is spectro chemical Method (T/F)

(11d) Cellulometry is
a) Electro-chemical Method
b) Magneto-chemical -
c) Thermal Method
d) ans

(12a) Calorimetry involves measuring of Thermal Energy (T/F)

(12b) polarography & polarimetry is electrochemical Method (T/F)

(12c) pH-GE Ts ...
a) electron transfer electrode
b) Membrane electrode
c) ions exchange electrode
d) both (b) & (c)

(123) pH range of Quinhydrone is —
a) 0 – 14 b) 0 – 8
c) 0 – 12 d) 0 – 11

(124) Lithia-silica glass electrode used for det. of —
a) Li^+ b) Na^+
c) H^+ ion d) all of the above

(125) potential of C.E depends on [Cl⁻] & Temp (T/F)

(126) Potential of CE ↑ with ↓ Temp (T/F)

(127) Ag/AgBr can be used to determine Br⁻ (T/F)

(128) The boundary potential of Ag/AgCl depends on [Cl⁻] (T/F)

(129) Cu – Sensing probe is Complete ECC (T/F)

(130) In measuring pF of F-ISE the solution should be acidic (T/F)

(131) In Ca⁺⁺-ISE, the plot of electrode potential against Ca^{+2} activity has slope equal to 0.059 Volt (T/F)

(132) In Nernest equation $2.3\frac{RT}{F}$ equal to 0.059 when T equal to 293°K (T/F)
25° + 273 = 298°K not 293.

(133) which of the following electrode of 1st type —
a) Zn / Zn^{+2} b) Cu^{+2} / Cu
c) Fe(II)/ Fe^{+3} d) Pt-

(134) Which of the following Membrane liquid electr
a) Ca^{++} ISE b) K^+ - ISE
c) NO_3^- ISE d) all of the above

(135) F - ISE has the following characters exce
a) OH^- interfere with it
b) Single crystal electrode
c) used in acidic Medium
d) electron transfer electrode

(136) NHE :
a) Can be used routinly
b) it has shorter ~~time~~ half-life
c) Not hazardous
d) work at pH -0 -8

(137) schematic Representation of CE is :
a) Q, H^+ (XM) | H_2 Q
b) pt/ Q, H^+ (XM) | H_2 Q
c) pt/ Q, Cl^- (XM) | H_2 Q

(138) schematic representation of Ag/AgCl is :
a) pt, Ag^+ | A_2
b) Ag^+ | A_2
c) A_2, Cl^- (XM) | AgCl
d) Pt/A_2, Cl^- (XM) | AgCl

(139) SCE :
a) indicator electrode
b) Reference electrode of 1st type
c) Reference electrode of 2nd type
d) its potential depends on Mercurous ion

Which of the following electrode Not ... with electron transfer Mechanism,

a) GE b) Ca^{++}_ISE

c) F_ISE d) both (a) & (b)

e) all of the above

~~(141) Complete the follo~~

(141) NAs (11-18) Na2O Conc is ...

a) 18 mole % b) 21.4 mole%

c) 17 mole % d) 71 mole %

(142) ...... used to enhance alkaline error in GE

a) Lithia silica glass

b) Soda lime electrode

c) introduction of Al_2O_3 or Boron oxide

d) Non of the above

(143) all of the following are properties of ion exchanger except,

a) High ion selectivity

b) High ion exchange capacity

c) High solubility in sample solution

d) high viscosity

(144) Ion exchanger for Ca^{++}_ISE is ...

a) valinomycin b) Ca^{++}_didecyl phosphate

c) Resin d) Non

(145) Ion exchanger in K^{+}_ISE is valinomycin (T/F)

(146) Ion exchanger for NO_3^-_ISE is Resin (T/F)

(147) Silver halide electrode is —
a) Electron transfer electrode
b) Membrane Non crystalline ISE
c) Single crystal ISE
d) polycrystalline ISE

(148) polycrystalline Ag_2S electrode used For det. of ---
a) Ag^+ b) Sulfide c) Non

(149) Crystalline Membrane electrode Containing Mixture of PbS & Ag_2S is selective For --
a) Ag^+ b) S c) Pb^{+2}

(150) In F- ISE, the single crystal is ----
Lanthanum Fluoride (LaF_3) & Europium II Fluoride
KCl + KCl
Valinomycin

(151) The role of Europium II Fluoride in F-ISE is ---
a) acts as indicator electrode
b) improve Conductivity
c) No role & Can be eliminated

(152) Combination electrode is by Combining of F & SCE or Reference electrode (T/F)

(153) Factors affecting glass electrode Function —
a) Glass Composition
b) Hydroscopic nature
c) High resistance
d) all of the above

(154) MnO_4^- in neutral Medium give blackpot of MnO_2 (T/F)

(155) Redox titration involve the Follow...
a) electron transfer reaction
b) oxidation Reaction
c) Reduction
d) all of the above

(156) ... is called Reductant
a) loss electron
b) loss H_2
c) ...
d) both (a) & (b)

(157) $Cr_2O_7^{-2} + 6I^- + 14H^+ \rightarrow 2Cr^{+3} + 3I_2 + 7H_2O$

the equivalent wt of cromium will equal to ...
a) $\frac{1}{6}$ Molecular weight
b) $\frac{1}{5}$ Molecular weight
c) $\frac{1}{3}$ molecular weight
d) Non of the above

باحسب الـ oxidation Number بتاعة الكروم (Cr) الواحدة

(158) To form balanced equation we must have:
a) Charge balance
b) mass balance
c) electroneutralive Centre
d) electrochemical balance
e) both (a) & (b)

(159) The electrical potential of Cu^{+2}/Cu^{o} system equal to standard potential when rod of Cu is immersed in ...
a) 1M HCl
b) 1N $CuSO_4$
c) 1M $CuSO_4$
d) both (a) & (c)

(160) $Fe(CN)_6^{-4}$ give Color with Zn^{+2} which have Color of ......
a) brown ppt
b) sky blue ppt
c) blood Red
d) wine red.

[illegible] give brown or black ppt
[illegible] electron
b) 4
d) 6

(162) The most important requirement for redox indicator is
a) E_{ind} = E_{o} (analyte) ± 0.15 V
b) Lipid soluble
c) alcohol soluble
d) none of the above

(163) DPA can't be used for —
a) Fe^{+2}
b) MnO_4^-
c) Ce^{+4}
d) $Cr_2O_7^{-2}$

(164) Standardization of KMnO4 is done by —
a) oxalic acid
b) Sod oxalate
c) both (a) & (b)

(165) The prussian blue ppt is formed
a) $Fe_4[Fe(CN)_6]_3$
b) $Fe[Fe(CN)_6]^{-3}$
c) $Fe_4[Fe(CN)_6]_3$

(166) which of the following oxidised Cl^- to Cl_2
a) $K_2Cr_2O_7$
b) I_2
c) $KMnO_4$
d) None

(167) —— is titrant of Andrews Method
a) $K_2Cr_2O_7$
b) KBrO3
c) I_2
d) b & c are correct

(169) NaHCO3 in determination of AsO_3^{3-} Iodin is subed to ——
a) ↓ [H+] b) prevent shift of reac
c) N either one d) both @ & ⓑ

(162) hypoiodite is produced in situ (fresh) because —
a) highly volatile b) affected by atmosphere
c) adsorb Moisture d) unstable

(170) K [Ox]
a) Ivy sld b) perform andrews reaction
c) used in strong acid medium
d) all of the above

(171) Hy [Ob$^-$] (s)
a. Primary sld
b. as result of dissolve periodic^{e} in water
c. selective reaction of organic Cpd
d. all of the above

(172) Br_2 is used to determine phenol in ——
a) acidic Medium b) basic
c) Neutral

(173) Mixture of NaH_2PO_4 & I_2 used For det. of —
a) Strong acid medium b)
a) Carboxylic acid b) glycerol
c) glucose d) all of the above

(174) DMG is ——— chelating agent
a) bidentate b) Tridentate
c) Tetradentate d) Non

(175) Reduction of ions to Metal is ionic pressure (T/F)

(176) DPA sulfonic acid can be used as redox indicator in case of K2Cr2O7 titration (T/F)

(177) Cerric amm. nitrate is 1ry std (T/F)

(178) Bi^{+3} & Mg^{+2} can be analyzed by changing the buffer (T/F)

(179) Bi^{+3} & Fe^{+3} can be analyzed by change pH (T/F)

(180) Hexamine or acetate can be used in titration of Cu^{+2}, ph & Bi^{+3} (T/F)

(181) To titrate K^+ by EDTA we adjust pH by
a) NH_3/NH4Cl b) HNO3
c) CH_3COOH d) None of the above.

(182) Methylene blue is ____ indicator
a) Redox b) pH c) acid-base

(183) To determine glucose using I_2 & I^- we use
a) Iodine b) $NaHCO_3$ c) NaOH

(184) Titration in Iodometry
a) KI b) KIO_3 c) $Na_2S_2O_3$

(185) Titrant in Iodometry
a) KI b) KIO_3 c) $Na_2S_2O_3$

(186) Cu^{+2} is determined by Iodimetry (T/F)

(187) Starch used as indicator in Cu^{+2}/CuI system
& I_2/$2I^-$ system (T/F)

(128) Starch in Iodimetry & Iodometry is added
start of titration [T/F]

(129) Iodometry can determine oxidant as
$Cr_2O_7^{-2}$ [T/F].

(130) KI is used to determine I^-, hydrazine &
hydrazine derivatives [T/F]

(131) Color of ICl_2^- is orange. [T/F]

(132) H_3BO_3 is added to starch as preservative [T/F]

(133) Viramine blue B, oxidised form is colourless [T/F]

(134) Copper glycerine complex has No charge [T/F]

Answer

1) a
2) c
c
[illegible]
b
d . used as
[illegible] later in Lichia
[illegible] Method
d
d
b
F
e

d
F
F
20) F
21) c
22) T
23) e
24) b
e
T
F
F
d
T
T

32) a
33) F
34) a
35) d
36) d
37) b
38) b
39) d
40) c
41) b
42) b
43) d
44) a
45) d
46) c
47) T
48) b
49) b
50) e
51) T
52) F
53) e
54) F
55) F
56) T
57) b
58) F
59) T
60) b
61) c
62) a
63) d
64) d

65) c
66) a
67) F
68) c
69) T
70) b
71) a
72) d
73) b
74) d
75) F
76) d
77) d
78) c
79) e
80) a
81) d
82) b
83) T
84) a
85) b
86) d
87) T
88) d
89) c
90) b
91) c
92) e
93) a
94) b
95) b
96) c
97) c

(98) b
(99) b
(100) F / loss of 8 c
(101) d
(102) d
(103) T
(104) T
[illegible]
(111) a
(112) b
(113) b
(114) d
(115) J
(116) c
(117) F
(118) F
(119) c
(120) T
(121) F
(122) d
(123) b
(124) c
(125) T
(126) T
(127) T
(128) F
(129) T
(130) T
equal to over

(132) F / equal to 298
(133) e
(134) d
(135) d
(136) b
(137) b
(138) d
(139) c
(140) e
(141) a
(142) c
(143) e
(144) b
(145) T
(146) T
(147) d
(148) b
(149) ~~b~~ c
(150) a
(151) b
(152) T
(153) d
(154) T
(155) d
(156) d
(157) c
(158) e
(159) c
(160) b
(161) a
(162) a
(163) a
(164) b
(165) b

(166) e
(167) c
(168) a
(169) d
(170) d
(171) d
(172) a
(173) c
(174) a
(175) T
(176) T
(177) T
(178) T
(179) T
(180) F
(181) d
(182) a
(183) c
(184) a
(185) c
(186) F
(187) F
(188) F
(189) T
(190) T
(191) F
(192) T
(193) F
(194) T